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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,749	02/27/2004	Yoshiharu Tajima	FUJX 20.963	9601

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KATTEN MUCHIN ROSENMAN LLP
575 MADISON AVENUE
NEW YORK, NY 10022-2585

EXAMINER

RAMPURIA, SHARAD K

ART UNIT	PAPER NUMBER
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2617

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/789,749

Applicant(s)

TAJIMA, YOSHIHARU

Examiner

Sharad Rampuria

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

I. The Art Unit location of this application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.

Continued Examination Under 37 CFR 1.114

II. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/29/2006 has been entered.

Disposition of the claims

III. The current office-action is in response to the RCE filed on 11/29/2006.

Accordingly, Claims 11-16 is newly appended claims, thus, Claims 1-16 are imminent for further assessment as follows:

Claim Rejections - 35 USC § 103

IV. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Dolan** [US 6628632] in view of **Yamashita et al.** [US 6108547].

As per claim 1, Dolan teaches:

A radio base station apparatus (100; Fig.2, Col.5; 39-44, Claim 1; 16-18 and Abstract) comprising:

A receiving section for receiving a signal from a terminal via a radio channel assigned to the terminal; (e.g. The base station controller includes a transceiver 340 for receiving signals from and transmitting signals to antenna 320; Col.5; 45-48, Claim 1; 19-22)

A network interface section for delivering the received signal to a network when a local station is not the particular radio base station; (e.g. In step 404, the primary controller supervises ordinary call processing routines as is known in the art. As a part of the call processing, the primary controller periodically measures the signal quality from the wireless terminal. If signal quality diminishes below a certain point, the call may be terminated or a handoff may be forced, as is known in the art; Col.7; 62-Col.8; 23) and

Dolan doesn't teach specifically, an identifying section for identifying a particular radio base station, which is to maintain the radio channel between the radio base station apparatus and the terminal during a process of a diversity handover for the terminal; an inter-office interface section for delivering to the network a composite wave of the signal and a signal that is forwarded from a radio base station forming a wireless zone adjacent to a wireless zone formed by the local station, when the local station is the particular radio base station, the forwarded

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signal having arrived at the radio base station from the terminal via the radio channel. However, **Yamashita** teaches in an analogous art, that an identifying section for identifying a particular radio base station, which is to maintain the radio channel between the radio base station apparatus and the terminal during a process of a diversity handover for the terminal; (e.g. handover based on diverse reception of signals; Col.5; 37-58, Col.4; 63-Col.5; 7)

An inter-office interface section for delivering to the network a composite wave of the signal and a signal that is forwarded from a radio base station forming a wireless zone adjacent to a wireless zone formed by the local station, when the local station is the particular radio base station, the forwarded signal having arrived at the radio base station from the terminal via the radio channel. (e.g. handover based on diverse reception of signals; Col.5; 37-58, Col.4; 63-Col.5; 7). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Dolan including an identifying section for identifying a particular radio base station, which is to maintain the radio channel between the radio base station apparatus and the terminal during a process of a diversity handover for the terminal; an inter-office interface section for delivering to the network a composite wave of the signal and a signal that is forwarded from a radio base station forming a wireless zone adjacent to a wireless zone formed by the local station, when the local station is the particular radio base station, the forwarded signal having arrived at the radio base station from the terminal via the radio channel in order to provide a method for carrying out a diversity handoff in a cellular mobile communication system, and a system and a base transceiver station for implementing the same.

As per claim 2, Dolan teaches:

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A radio base station apparatus (100; Fig.2, Col.5; 39-44, Claim 1; 16-18 and Abstract) comprising:

A receiving section for receiving a signal from a terminal via a radio channel assigned to the terminal; (e.g. The base station controller includes a transceiver 340 for receiving signals from and transmitting signals to antenna 320; Col.5; 45-48, Claim 1; 19-22) by each IP layer (e.g. IP; Col.7; 48-55)

A network interface section for delivering the signal to a network when a local station is not the particular radio base station; (e.g. In step 404, the primary controller supervises ordinary call processing routines as is known in the art. As a part of the call processing, the primary controller periodically measures the signal quality from the wireless terminal. If signal quality diminishes below a certain point, the call may be terminated or a handoff may be forced, as is known in the art; Col.7; 62-Col.8; 23) and

Dolan doesn't teach specifically, an identifying section for identifying a particular radio base station, which is to maintain the radio channel between the radio base station apparatus and the terminal during a process of a diversity handover for the terminal; an inter-office interface section for forwarding the signal to the particular radio base station when the local station is not the particular radio base station. However, **Yamashita** teaches in an analogous art, that an identifying section for identifying a particular radio base station, which is to maintain the radio channel between the radio base station apparatus and the terminal during a process of a diversity handover for the terminal; (e.g. handover based on diverse reception of signals; Col.5; 37-58, Col.4; 63-Col.5; 7) an inter-office interface section for forwarding the signal to the particular radio base station when the local station is not the particular radio base station. (e.g. handover

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based on diverse reception of signals; Col.5; 37-58, Col.4; 63-Col.5; 7).

As per claim 3, Dolan teaches:

A radio base station apparatus (100; Fig.2, Col.5; 39-44, Claim 1; 16-18 and Abstract) comprising:

A network interface section for capturing a signal that is delivered from a network in a physical layer (Col.7; 48-55) of the network; (e.g. In step 404, the primary controller supervises ordinary call processing routines as is known in the art. As a part of the call processing, the primary controller periodically measures the signal quality from the wireless terminal. If signal quality diminishes below a certain point, the call may be terminated or a handoff may be forced, as is known in the art; Col.7; 62-Col.8; 23)

A transmitting section for transmitting the signal to the terminal via the radio channel; (e.g. The base station controller includes a transceiver 340 for receiving signals from and transmitting signals to antenna 320; Col.5; 45-48, Claim 1; 19-22) and

Dolan doesn't teach specifically, an identifying section for identifying a particular radio base station, which is to maintain the radio channel between the radio base station apparatus and the terminal during a process of a diversity handover for the terminal; an inter-office interface section for forwarding the signal to a radio base station forming a wireless zone adjacent to a wireless zone formed by a local station, when the local station is the particular radio base station. However, **Yamashita** teaches in an analogous art, that an identifying section for identifying a particular radio base station, which is to maintain the radio channel between the radio base station apparatus and the terminal during a process of a diversity handover for the terminal; (e.g.

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handover based on diverse reception of signals; Col.5; 37-58, Col.4; 63-Col.5; 7) an inter-office interface section for forwarding the signal to a radio base station forming a wireless zone adjacent to a wireless zone formed by a local station, when the local station is the particular radio base station; (e.g. handover based on diverse reception of signals; Col.5; 37-58, Col.4; 63-Col.5; 7).

As per claim 4, Dolan teaches:

A radio base station apparatus (100; Fig.2, Col.5; 39-44, Claim 1; 16-18 and Abstract) comprising:

A transmitting section for transmitting the signal to the terminal via the radio channel when the local station is not the particular radio base station. (e.g. The base station controller includes a transceiver 340 for receiving signals from and transmitting signals to antenna 320; Col.5; 45-48, Claim 1; 19-22)

Dolan doesn't teach specifically, an identifying section for identifying a particular radio base station, which is to maintain the radio channel between the radio base station apparatus and the terminal during a process of a diversity handover for the terminal; an inter-office interface section for forwarding the signal to a radio base station forming a wireless zone adjacent to a wireless zone formed by a local station, when the local station is the particular radio base station. However, **Yamashita** teaches in an analogous art, that an identifying section for identifying a particular radio base station, which is to maintain the radio channel between the radio base station apparatus and the terminal during a process of a diversity handover for the terminal; (e.g. handover based on diverse reception of signals; Col.5; 37-58, Col.4; 63-Col.5; 7) an inter-office

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interface section for forwarding the signal to a radio base station forming a wireless zone adjacent to a wireless zone formed by a local station, when the local station is the particular radio base station; (e.g. handover based on diverse reception of signals; Col.5; 37-58, Col.4; 63-Col.5; 7)

As per claim 5, Dolan teaches:

The radio base station apparatus according to claim 1, further comprising an inter-office link securing section for securing a link according to a procedure of a channel control for assigning the radio channel to the terminal or through cooperation with a base station controller performing the channel control, the link being used for transfer of the signal between the radio base station apparatus and the radio base station, wherein said inter-office interface section combines the received signal with a signal that is forwarded via the link secured by said inter-office link securing section. (Col.7; 48-55)

As per claim 6, Dolan teaches:

The radio base station apparatus according to claim 2, further comprising an inter-office link securing section for securing a link according to a procedure of a channel control for assigning the radio channel to the terminal or through cooperation with a base station controller performing the channel control, the link being used for transfer of the signal between the radio base station apparatus and the particular radio base station, wherein said inter-office interface section forwards the signal to the particular radio base station via the link secured by said inter-office link securing section. (Col.7; 48-55)

As per claim 7, Dolan teaches:

The radio base station apparatus according to claim 3, further comprising an inter-office link securing section for securing a link according to a procedure of a channel control for assigning the radio channel to the terminal or through cooperation with a base station controller performing the channel control, the link being used for transfer of the signal between the radio base station apparatus and the radio base station, wherein said inter-office interface section forwards the signal via the link secured by said inter-office link securing section. (Col.7; 48-55)

As per claim 8, Dolan teaches:

The radio base station apparatus according to claim 4, further comprising an inter-office link securing section for securing a link according to a procedure of a channel control for assigning the radio channel to the terminal or through cooperation with a base station controller performing the channel control, the link being used for transfer of the signal between the radio base station apparatus and the radio base station, wherein said inter-office interface section captures a signal that is forwarded via the link secured by said inter-office link securing section. (Col.7; 48-55)

As per claim 9, Dolan teaches:

A base station controller (100; Fig.2, Col.5; 39-44, Claim 1; 16-18 and Abstract)
comprising:

A channel controlling section for performing a channel control over a terminal in cooperation with a radio base station forming a wireless zone where the terminal can visit, (e.g. The signal quality of a neighboring base station is approximated or derived from the measured pilot channel strength, using methods which are well-known in the art; Col.8; 1-9) and

A network interface section for interfacing with a network under the channel control. (e.g. In step 404, the primary controller supervises ordinary call processing routines as is known in the art. As a part of the call processing, the primary controller periodically measures the signal quality from the wireless terminal. If signal quality diminishes below a certain point, the call may be terminated or a handoff may be forced, as is known in the art; Col.7; 62-Col.8; 23)

Dolan doesn't teach specifically, for determining a particular radio base station according to the channel control and all or part of configuration of the wireless zone, channel allocation, and frequency allocation, the particular radio base station being to maintain a radio channel assigned to the terminal during a process of a diversity handover for the terminal; the network being a network in which a communication channel is to be formed between said base station controller and the terminal via the radio base station. However, **Yamashita** teaches in an analogous art, that for determining a particular radio base station according to the channel control and all or part of configuration of the wireless zone, channel allocation, and frequency allocation, the particular radio base station being to maintain a radio channel assigned to the terminal during a process of a diversity handover for the terminal; the network being a network in which a communication channel is to be formed between said base station controller and the terminal via the radio base station; (e.g. handover based on diverse reception of signals; Col.5; 37-58, Col.4; 63-Col.5; 7).

As per claim 10, Dolan teaches:

The base station controller according to claim 9, wherein said channel controlling section performs the channel control such that a radio base station is to be the particular radio base station, the radio base station forming a wireless zone in which the diversity handover is done in a suitable manner for all or part of configuration of a wireless zone, channel allocation, and frequency allocation. (e.g. The signal quality of a neighboring base station is approximated or derived from the measured pilot channel strength, using methods which are well-known in the art; Col.8; 1-9)

As per claim 11, Dolan teaches:

A radio communication method (Abstract) comprising the steps of:

Maintaining identification information allotted to a radio terminal for receiving data without renewing the identification information when the radio terminal moves from an area of a first radio base station to an area of a second radio base station, and transmitting data from the second radio base station by using the identification information; (e.g. In step 404, the primary controller supervises ordinary call processing routines as is known in the art. As a part of the call processing, the primary controller periodically measures the signal quality from the wireless terminal. If signal quality diminishes below a certain point, the call may be terminated or a handoff may be forced, as is known in the art; Col.7; 62-Col.8; 23) and

Dolan doesn't teach specifically, renewing the identification information when the radio terminal moves to an area of a third base station, and transmitting data from the third

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radio base station by using the renewed identification information. However, **Yamashita** teaches in an analogous art, that renewing the identification information when the radio terminal moves to an area of a third base station, and transmitting data from the third radio base station by using the renewed identification information. (e.g. handover based on diverse reception of signals; Col.5; 37-58, Col.4; 63-Col.5; 7).

As per claim 12, Dolan teaches:

The radio communication method according to claim 11, wherein said identification information is an IP address. (e.g. IP; Col.7; 48-55)

As per claims 13-14, Dolan teaches all the particulars of the claim except wherein said first radio base station sends primary information and said second radio base station sends secondary information, the primary information and the secondary information including same content information, and said radio terminal diversity-receives the primary information and the secondary information. However, **Yamashita** teaches in an analogous art, that the radio communication method according to claim 11, wherein said first radio base station sends primary information and said second radio base station sends secondary information, the primary information and the secondary information including same content information, and said radio terminal diversity-receives the primary information and the secondary information. (e.g. handover based on diverse reception of signals; Col.5; 37-58, Col.4; 63-Col.5; 7)

As per claims 15-16, Dolan teaches:

A radio system performing radio communication with a radio terminal that is in communication with a first radio base station (Abstract), comprising:

A second radio base station transmitting data by using identification information allotted to the radio terminal for receiving data from the first radio base station without renewing the identification information when the radio terminal moves from an area of the first radio base station to an area of the second radio base station; (e.g. In step 404, the primary controller supervises ordinary call processing routines as is known in the art. As a part of the call processing, the primary controller periodically measures the signal quality from the wireless terminal. If signal quality diminishes below a certain point, the call may be terminated or a handoff may be forced, as is known in the art; Col.7; 62-Col.8; 23) and

Dolan doesn't teach specifically, a third radio base station renewing the identification information when the radio terminal moves to an area of the third radio base station, and transmitting data by using the renewed identification information. However, Yamashita teaches in an analogous art, that a third radio base station renewing the identification information when the radio terminal moves to an area of the third radio base station, and transmitting data by using the renewed identification information. (e.g. handover based on diverse reception of signals; Col.5; 37-58, Col.4; 63-Col.5; 7).

Response to Amendments & Arguments

V. Applicant's arguments with respect to claims 1-16 has been fully considered but is moot in view of the new ground(s) of rejection.

Conclusion

VI. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharad Rampuria whose telephone number is (571) 272-7870. The examiner can normally be reached on M-F. (8:30-5 EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or EBC@uspto.gov.



Sharad Rampuria
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Art Unit 2617